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COSTS and RETURNS



**Western
Livestock
Ranches**

1964

FARM COSTS STUDIES

This report is part of a continuing nationwide study of costs and returns on commercial farms and ranches by type and size in some of the important farming regions of the United States. The study is conducted under the general supervision of Wylie D. Goodsell, Farm Production Economics Division, Economic Research Service. Objectives, methodology, procedure, and terms are uniform for all areas covered in the study.

The 1964 costs and returns studies have been conducted on the following:

- Dairy Farms, Northeast and Midwest
- Corn Belt Farms
- Egg-Producing Farms, New Jersey
- Broiler Farms, Maine, Delmarva, and Georgia
- Cotton Farms
- Tobacco Farms, Coastal Plain, North Carolina
- Tobacco-Livestock Farms, Bluegrass Area, Kentucky
- Wheat Farms, Plains and Pacific Northwest
- Western Livestock Ranches

Summary statistics for all types of farms in the study are presented in a report, revised annually. The latest such report was published in 1964 and is titled: "Farm Costs and Returns, Commercial Farms, by Type, Size, and Location," Agriculture Information Bulletin No. 230, Revised 1964.

Information on the studies can be obtained from Farm Production Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C. 20250.

COSTS AND RETURNS

WESTERN LIVESTOCK RANCHES, 1964

Wylie D. Goodsell and James R. Gray¹

SUMMARY

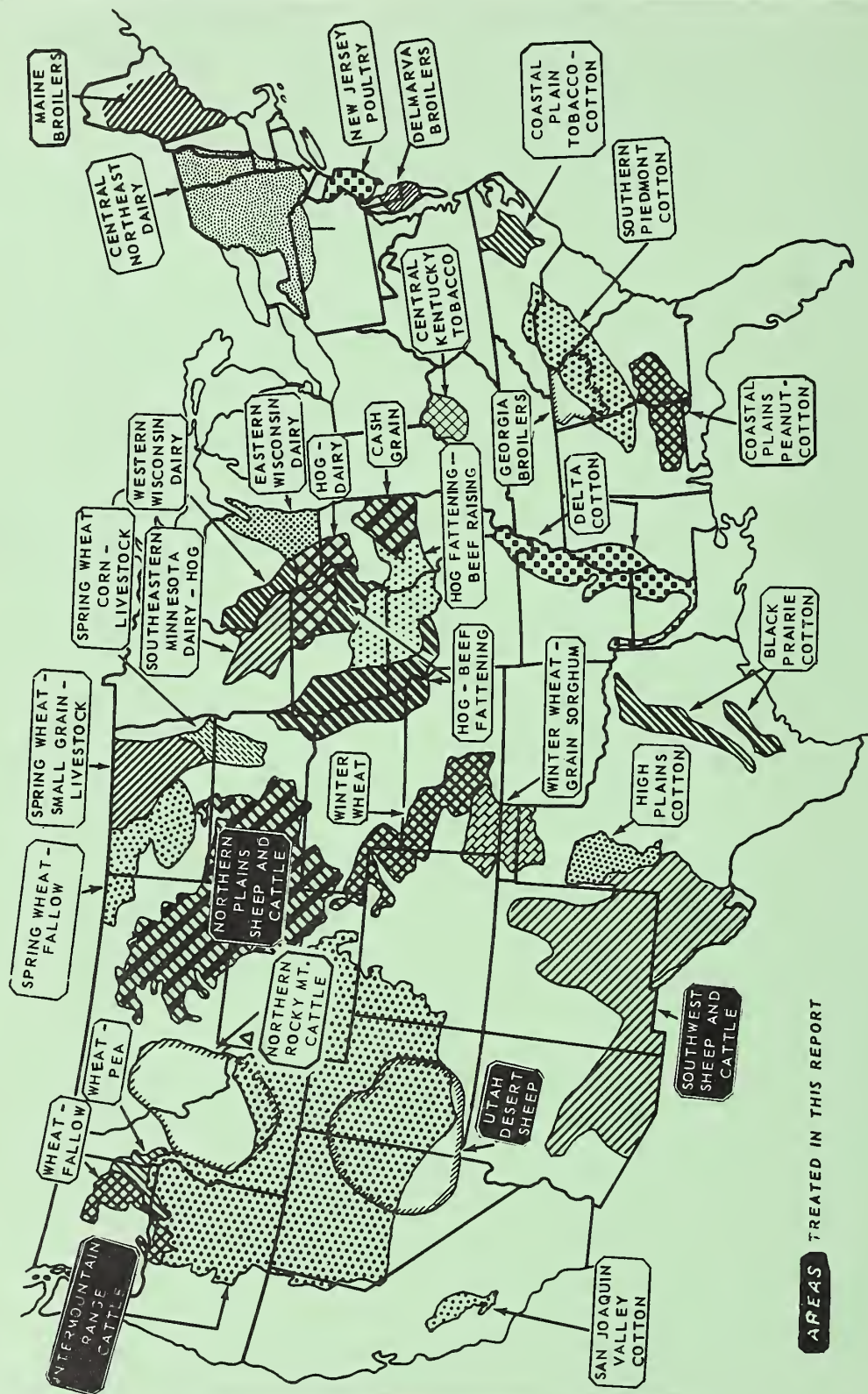
Production conditions, prices, and operations on typical Western livestock ranches in four widely separated areas varied considerably in 1964 (fig. 1). Changes in net ranch income from 1963 to 1964 ranged from an increase of 10 percent on 2-band desert-operated sheep ranches in Utah and Nevada to a decrease of 74 percent on Southwest cattle ranches. Cattle ranchers in the three major areas experienced lower net returns in 1964 than in 1963. Sheep ranchers in Utah-Nevada had higher returns; ranchers in the Northern Plains and Southwest had lower incomes (fig. 2). Net ranch incomes for 1962, 1963, and 1964 and the percentage change in income from 1963 to 1964 for these typical Western livestock ranchers were as follows:

	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>Percentage change</u> <u>1962 to</u> <u>1963 to</u> <u>1964</u> <u>1964</u>	
Cattle ranches:					
Northern Plains ...	\$ 7,252	\$ 7,385	\$ 6,043	-17	-18
Intermountain.....	11,936	10,133	6,860	-43	-32
Southwest.....	7,789	5,081	1,310	-83	-74
Sheep ranches:					
Northern Plains ...	10,404	12,961	11,765	13	-9
Utah-Nevada.....	15,037	13,261	14,631	-3	10
Southwest.....	7,855	5,926	3,258	-59	-45

Many factors were responsible for these changes. Major factors were drought and reduced output of range, higher prices for wool and lambs, and lower prices for cattle and calves. A favorable combination of these factors was particularly helpful to Utah-Nevada sheep ranchers. An unfavorable combination brought net ranch incomes on Southwest cattle ranches to the lowest level since 1956.

¹ Agricultural Economist, Farm Production Economics Division, Economic Research Service, U.S. Department of Agriculture, and Associate Professor, New Mexico State University, respectively. The New Mexico Agricultural Experiment Station is a contributor on the continuing study of costs and returns on commercial ranches in the Western Region.

LOCATION OF TYPES OF FARMS STUDIED



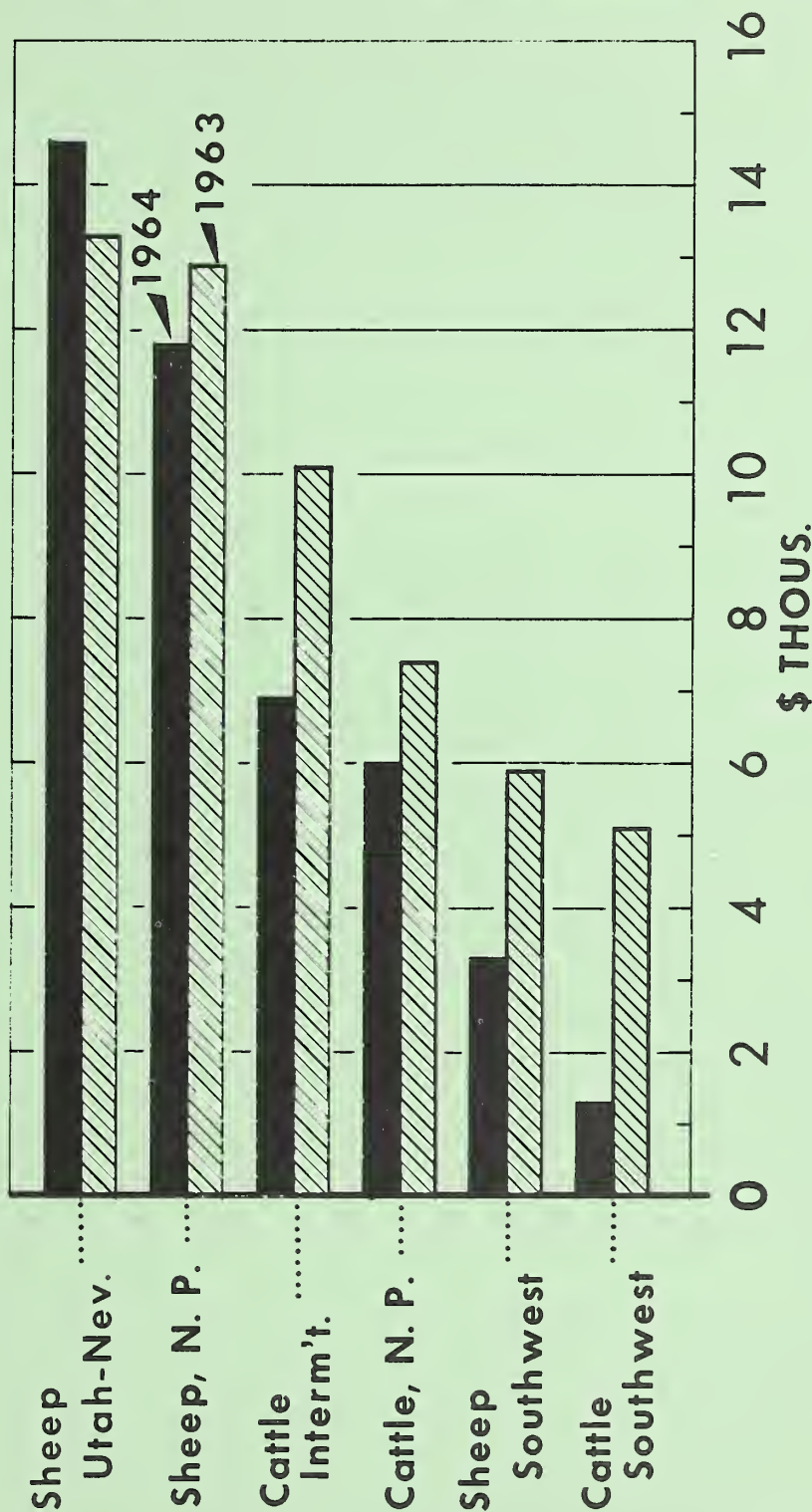
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NEG. ERS 133-65 (3) ECONOMIC RESEARCH SERVICE

Figure 1

NET RANCH INCOME

Western Livestock Ranches



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NEG. ERS 3606-65 (4) ECONOMIC RESEARCH SERVICE

Figure 2

In the Southwest, ranchers were plagued with drought for the third year in succession. Ranchers seem to adjust to one year of drought, but two or more consecutive years of drought make operations difficult. Despite droughts and lower prices for cattle and consequently lower incomes, cattle ranchers in all three areas continued to build up their breeding herds. Some of this was done by purchasing feed at relatively high prices. Prices received for cattle were considerably lower in 1964 than a year earlier; this was the chief factor in reducing incomes to these ranchers.

On the other hand, lamb prices were relatively high and were mainly responsible for increasing or keeping returns to sheep ranchers from going lower in 1964. Higher prices received for wool with relatively high production and wool incentive payments contributed substantially to incomes of sheep ranchers. Relatively large death losses of sheep and lambs were reported in 1964 on ranches in all three areas and were factors in holding down returns. Had it not been for the high death loss among sheep and lambs and the effects of drought, 1964 might easily have been one of the outstanding income years to these sheep ranchers.

CATTLE RANCHES

Northern Plains

In 1964, production conditions on Northern Plains ranches were favorable again for the third year in succession. Conditions were favorable until the last month of the year, when severe winter storms caused excessive livestock and income losses through much of the region. Livestock production rates were high, although not as high as those in 1963. Death loss percentages in 1964 were about twice as high as the low levels in 1963. Prices for calves were lower in 1964 than in 1963 and were lower than those received in the last several years.

Northern Plains cattle ranchers sold more than the usual number of calves and breeding cattle in 1964. As a result, total cash receipts increased about 20 percent from 1963 to 1964, despite lower prices received (table 1). Although cattle numbers increased slightly from January to December in 1964, the extent of the increase was the smallest in the last 3 years.

Wheat is the major cash crop on many cattle ranches in this area. Wheat yields in 1964 were relatively high, but their effect on income was more than offset by a 28-percent decrease in the price of wheat from the previous year. Hay yields were also relatively high in 1964, and over the last 2 years of favorable production, feed inventories had been built up. With the additional favorable year in 1964, some ranchers sold hay. However, when the heavy storms came in December many ranchers were unable to get hay to their livestock, and severe losses occurred on many ranches.

The net result of moderately favorable grazing conditions during most of 1964, and unfavorable prices for livestock and crops, was a reduction of about 10 percent in gross income per ranch from 1963.

Cash expenditures in 1964 on typical cattle ranches in the Northern Plains were much the same as in 1963, both in total amount spent and in kind of expenditure. Labor costs

and property taxes were slightly higher than in previous years. Some reduction in cash expenditures occurred because ranchers bought fewer replacement bulls and other livestock in 1964. Gross expenses (including depreciation) were much the same as in 1963. Efforts to reduce expenses were canceled by relatively larger expenditures and losses during the December storms.

Net ranch income in 1964 was about 18 percent lower than in 1963. The average net ranch income of about \$6,000 yielded a return per hour to the operator and his family for their labor and management that was substantially less than the returns in 1962 and 1963.

Summary index numbers indicate production was slightly more favorable in 1964, 2 points higher than in 1963. Production per hour of labor was 3 points higher. Production per unit of input and range conditions were lower than in 1963. Cost per unit of production was higher. The largest change occurred in prices. Prices received by these ranchers in 1964 were 13 index points lower than those received in 1963; prices paid were 8 index points lower. Prices paid for feed concentrates and replacement livestock accounted for much of the reduction in average prices paid.

Intermountain Region

Net ranch income in 1964 on typical cattle ranches in the Intermountain area averaged 32 percent below a year earlier and 40 percent below the 1957-59 average. It was the lowest net income since 1956. Reduced returns in 1964 resulted from a combination of factors, but the major reason was lower prices received for cattle and calves.

In 1964, calves brought approximately \$19.50 per hundredweight on these ranches. This was \$5.10 below a year earlier and \$8.00 below prices received in 1962. Prices received for older steers and heifers averaged 13 percent or about \$2.70 per hundredweight lower than in 1963. Cull cows brought only \$11.75 per hundredweight in 1964, about 17 percent below a year earlier. The overall index of prices received for products sold on these ranches averaged 81 ($1957-59=100$), 15 percent below a year earlier and 32 percent below 1962 (table 1).

Range conditions in 1964 varied widely from area to area and, on the average, were not as good as in 1962 or 1963. They were relatively poor in the late spring and fall and cattle came off the range at lighter weights. In addition, ranchers in some localities had late-spring and early-fall frosts, which reduced hay yields and shortened the pasture season. However, ranchers in some portions of the area had the best crop production conditions in several years. The supply of irrigation water was better than in 1963 and was in plentiful supply in most areas. Except for a limited acreage of small grains, the cropland on these ranches is devoted entirely to production of alfalfa and mixed and native hay. The acreage and yield of hay in 1964 were both up from a year earlier. The overall result was that net ranch production in 1964 was 6 percent below a year earlier.

Despite this, these cattle ranchers evidently expected conditions to improve, as they continued to increase their breeding herds. More than the usual number of beef cows was kept and slightly more yearling and 2-year old heifers were held back for breeding later. Fewer calves were held than in 1963.

Table 1.- Costs and Returns, Western Cattle Ranches, 1963 and 1964

Item	Unit	Northern Plains		Intermountain region		Southwest	
		1963	1964 1/	1963	1964 1/	1963	1964 1/
Land in ranch.....	Acre	4,430	4,440	1,760	1,775	11,300	11,560
Livestock on ranch:							
All cattle.....	Number	142	167	290	298	236	252
Cows and heifers, 2 years old and over.....	do.	94	105	150	144	154	160
Calf crop.....	Percent	87	85	85	83	81	80
Total ranch capital, Jan. 1.....	Dollar	89,260	90,370	95,550	92,330	179,190	188,200
Land and buildings.....	do.	52,830	53,950	39,780	41,710	139,390	149,410
Livestock.....	do.	25,510	25,300	45,110	39,240	32,860	31,000
Machinery and equipment.....	do.	7,730	7,700	6,530	6,810	5,330	5,640
Crops.....	do.	3,190	3,420	4,130	4,570	1,610	2,150
Total cash receipts.....	do.	10,086	12,228	16,147	12,496	12,525	14,733
Crops.....	do.	1,648	1,829	0	516	0	0
Cattle.....	do.	7,706	9,569	15,971	11,833	11,893	14,168
Other livestock and livestock products.....	do.	432	480	30	19	342	225
Other, including Government payments.....	do.	300	350	146	128	290	340
Value of perquisites.....	do.	998	912	841	841	895	754
Inventory change:							
Livestock.....	do.	3,353	1,017	562	1,506	1,647	-2,068
Crops.....	do.	580	-578	202	-543	269	-21
Gross ranch income.....	do.	15,017	13,579	17,752	14,300	15,336	13,398

Total cash expenditures.....	Dollar	7,432	7,275	7,818	7,619	10,410	11,594
Feed and grazing fees.....	do.	301	420	1,269	996	2,135	3,990
Livestock purchased.....	do.	1,665	1,243	429	377	2,125	1,400
Other livestock expense.....	do.	151	174	107	110	158	156
Crop expense.....	do.	65	33	127	126	10	7
Machinery purchased.....	do.	1,440	1,350	1,518	1,539	1,315	936
Other machinery expense.....	do.	1,457	1,466	1,379	1,362	1,374	1,463
Ranch buildings and fences.....	do.	530	541	240	250	900	600
Labor hired.....	do.	574	792	1,148	1,197	742	1,115
Taxes.....	do.	997	1,007	1,460	1,518	1,147	1,247
Other.....	do.	252	249	141	144	504	680
Inventory adjustment:							
Buildings and fences.....	do.	-14	-16	-25	-34	12	295
Machinery and equipment.....	do.	214	277	-174	-145	-167	199
Gross expense.....	do.	7,632	7,536	7,619	7,440	10,255	12,088
Net ranch income.....	do.	7,385	6,043	10,133	6,860	5,081	1,310

Ranch production and price indexes (1957-59=100)

Net ranch production.....	---	118	120	104	98	98	97
Range condition.....	---	103	99	101	99	93	89
Prices received for products sold.....	---	101	88	95	81	95	78
Prices paid, including wages to hired labor..	---	101	93	110	111	111	110

1/ Preliminary.

Note: The information presented here is on an owner-operator basis primarily for comparability between types of ranches. Net ranch income is the return to operator and unpaid members of the family for their labor and management on the ranch and return to total capital. No allowance has been made for payment of rent, interest, or mortgage.

Lower prices for cattle and calves and fewer livestock sold, and at lighter weights, reduced 1964 cash receipts from livestock sales by 26 percent from 1963. Virtually all of the income on these ranches is from the cattle enterprise.

Total cash expenditures averaged about 3 percent below 1963, primarily because of a decrease in expenditures for feed. Because of greater production of hay, cattle ranchers in this area purchased about three-fifths as much hay as in 1963. Despite higher prices paid for hay in 1964, the total outlay for feed, including grazing fees, was about 22 percent below 1963. Bull replacements and miscellaneous crop and livestock expenditures were slightly lower than in 1963. All other major groups of expenditures--machinery, buildings, labor, and taxes, increased. Prices paid for most expenditure items and services used in production continued the upward trend and averaged 11 percent higher in 1964 than in 1957-59. Total cost per unit of production and operating expense per unit of production increased, but production per man-hour and per unit of input decreased.

Southwest

With 3 consecutive years of drought, production conditions on typical Southwestern cattle ranches reached a critical stage in 1964. Ranchers were forced to feed during much of the normal summer grazing period. Drought conditions were most severe in west Texas and eastern New Mexico. Ranches in western New Mexico and eastern Arizona experienced more favorable weather conditions. However, most of the cattle ranches are in the eastern portion of the area. In 1964, the overall range forage condition

was about 5 percent below the unfavorable 1963 level. In addition, prices paid for hay continued high, generally in excess of \$30 per ton. Unusually low calf prices compounded the effect of the 1964 weather disaster on Southwest cattle ranches.

Cattle ranchers in the Southwest held some production rates at recent high levels despite unfavorable conditions. Calf crop percentages were comparable to those in 1957-61. Calf weights were light in the eastern portion of the region and moderate to heavy in western portions.

Cash receipts were higher in 1964 than in 1963 because many ranchers sold nearly all their calves and culled breeding herds heavily (table 1). Receipts from cattle, normally over 95 percent of total cash receipts, increased considerably from 1963 levels. However, a reduction in inventory of about \$2,000 per ranch canceled out much of the gain in receipts.

The major cash expenditure in 1964 was for feed. Total feed expenditures normally average about 12 percent of total cash expenditures on these ranches, but in 1964 they averaged more than 34 percent. Despite the heavy cash outlay for feed, total cash expenditures increased only 11 percent. Expenditures were reduced for herd replacements, purchases of machinery and vehicles, and outlays for replacement and repair of buildings and improvements. Wherever they could, these ranchers reduced expenditures as much as possible during 1964.

Despite efforts to increase sales and reduce expenditures, net ranch incomes on Southwestern cattle ranches were the lowest since 1956.

The income of about \$1,300 per ranch in 1964 was only about a fourth of the relatively low income received in 1963. The drought-relief program initiated in several counties in the region probably prevented greater losses on individual ranches.

A summary of the underlying causes for the changes in costs and returns on Southwest cattle ranches is provided by the index numbers.

Net production and production per hour of man labor and per unit of input were less in 1964 than in 1963. Meanwhile, costs per unit of production were higher, and the disparity between prices received and prices paid exhibited an even greater spread than previously. A major price break occurred in 1964, with ranchers experiencing an overall reduction of 18 percent in prices received.

SHEEP RANCHES

Northern Plains

Net returns in 1964 to sheep ranchers in the Northern Plains averaged about 9 percent below a year earlier (table 2). Range and livestock conditions, especially in the latter part of the year, were not as favorable as in 1963. Net ranch production was down about 14 percent. However, prices received for lambs and wool were 14 and 10 percent higher, respectively, than in 1963.

Despite the 14-percent increase in prices of lambs, cash receipts from the sale of sheep and lambs declined between 3 and 4 percent from 1963 to 1964. Receipts from the sale of wool increased by 6 percent, but wool incentive payments were considerably lower in 1964. Total cash receipts were only slightly below a year earlier.

The build-up in flock size that took place after the drought of 1960-61 came to an end in 1963, and the number of sheep in the breeding herd January 1, 1964, was about the same as a year earlier. Numbers of sheep and lambs sold in 1963 were about 15 percent greater than in 1964.

Cash expenditures on sheep ranches in the Northern Plains were

much the same in 1964 as in 1963. Feed costs advanced moderately as some ranchers were forced to buy feed during the severe early-winter 1964-65 storms. Reduced labor costs, as ranchers continued to shift from herders to fences in caring for sheep, were partially offset by the higher machinery and vehicle cost of caring for the sheep, and for extensive improvements.

A significant change on these ranches in 1964 came in prices received. The index of prices received advanced 5 index points to the highest level since 1958.

Had it not been for the severe winter weather, and death losses about double the normal rate, the generally favorable weather and price conditions earlier in the year would have made 1964 a record income year, comparable in many ways to the 1951 record year.

Utah-Nevada²

Net ranch incomes on typical 2-band desert-operated sheep ranches in western Utah and east-central Nevada averaged 10 percent

² This is a new ranch series. Estimates for years prior to 1963 are in tables 3 and 4.

Table 2.- Costs and Returns, Western Sheep Ranches, 1963 and 1964

Item	Unit	Northern Plains			Utah-Nevada			Southwest		
		1963			1963			1963		
		1964 1/			1964 1/			1964 1/		
Land in ranch.....	Acre	6,700	6,820		10,220	10,240		13,520	13,540	
Livestock on ranch:										
Sheep.....	Number	1,396	1,392		2,182	2,217		1,256	1,219	
Ewes.....	do.	1,193	1,217		1,857	1,913		1,016	945	
Lamb crop.....	Percent	89	85		88	85		77	73	
Fleece weight.....	Pound	10.3	10.1		10.6	10.8		9.8	9.5	
Total ranch capital, Jan. 1.....	Dollar	100,850	104,440		157,410	161,510		219,400	222,840	
Land and buildings.....	do.	67,200	72,530		101,840	102,300		192,410	195,360	
Livestock.....	do.	25,480	23,810		47,000	50,540		21,430	21,440	
Machinery and equipment.....	do.	6,730	6,930		6,690	6,790		4,940	5,080	
Crops.....	do.	1,440	1,170		1,880	1,880		620	960	
Total cash receipts.....	do.	25,718	25,328		35,409	38,033		18,405	16,898	
Crops.....	do.	828	619		927	1,026		0	0	
Sheep and lambs.....	do.	14,397	13,931		20,742	23,212		7,817	6,947	
Wool.....	do.	6,844	7,275		10,108	11,372		5,577	5,688	
Wool payments.....	do.	2,206	1,301		3,131	2,022		1,633	948	
Other livestock and livestock products.....	do.	1,143	1,802		501	401		3,178	3,015	
Other, including Government payments.....	do.	300	400		0	0		200	300	
Value of perquisites.....	do.	942	978		681	655		830	788	
Inventory change:										
Livestock.....	do.	605	-512		883	90		-68	-659	
Crops.....	do.	-109	-227		-54	25		235	82	
Gross ranch income.....	do.	27,156	25,567		36,919	38,803		19,402	17,109	

Total cash expenditures.....	Dollar	14,949	14,585	23,932	24,411	12,311	13,345
Feed and grazing fees.....	do.	2,950	3,228	4,404	4,528	2,902	4,068
Livestock purchased.....	do.	1,436	1,113	1,215	1,694	1,542	715
Other livestock expense.....	do.	293	293	2,548	2,605	454	652
Crop expense.....	do.	29	20	224	226	11	7
Machinery purchased.....	do.	1,678	1,701	1,708	1,691	1,003	1,034
Other machinery expense.....	do.	1,429	1,486	1,171	1,144	1,419	1,388
Ranch buildings and fences.....	do.	1,180	1,200	790	797	380	1,000
Labor hired.....	do.	3,499	2,996	8,944	8,691	2,503	2,333
Taxes.....	do.	1,262	1,267	2,384	2,473	1,287	1,345
Other.....	do.	1,193	1,281	544	562	810	803
Inventory adjustment:							
Buildings and fences.....	do.	-571	-721	-244	-228	1,151	505
Machinery and equipment.....	do.	-183	-62	-30	-11	14	1
Gross expense.....	do.	14,195	13,802	23,658	24,172	13,476	13,851
Net ranch income.....	do.	12,961	11,765	13,261	14,631	5,926	3,258

Ranch production and price indexes (1957-59=100)

Net ranch production.....	---	123	106	101	99	95	80
Range condition.....	---	103	101	96	106	93	89
Prices received for products sold <u>2/</u>	---	94	99	93	99	91	92
Prices paid, including wages to hired labor....	---	104	102	111	114	113	117

1/ Preliminary. 2/ Including wool incentive payments.

Note: The information presented here is on an owner-operator basis primarily for comparability between types of ranches. Net ranch income is the return to operator and unpaid members of the family for their labor and management on the ranch and return to total capital. No allowance has been made for payment of rent, interest, or mortgage.

higher in 1964 than in 1963 (table 2). Many factors contributed to the increased returns. Important among these were improved winter range conditions and less supplemental feeding, near-record crop production, near-record wool production, and higher lamb and wool prices.

Lambs brought \$20.50 per hundredweight on these ranches in 1964, compared with \$18.05 in 1963. The price was the highest since 1958. Ewes sold for nearly the same in 1964 as in 1963; but cash receipts from the sale of ewes are relatively insignificant on these ranches. Lambs came off the range at about the same weights as the record high in 1963. The percentage lamb crop was the lowest in several years and death loss of sheep and lambs was the highest in more than 10 years. However, total hundredweight of lambs sold was about the same in 1963 and 1964. Prices received for lambs in 1964 increased more than enough to offset these factors. Total receipts from lamb sales in 1964 were approximately 13 percent higher than those in 1963 and the highest since 1958, when lambs sold for nearly \$21 per hundredweight.

The wool clip averaged 10.8 pounds per animal sheared. This was a record high for these ranches, and total pounds of wool sold per ranch was slightly under the record high in 1960 and 3 to 4 percent greater than in 1963. The price received for wool in 1964 was the highest since 1957. Despite a record-low wool incentive payment rate per pound of wool sold, receipts from wool in 1964, including incentive payments for wool, averaged slightly higher than in 1963.

Except for a few sales of small grains and a little income from beef cows, the income on these

ranches is from the sheep enterprise. Total cash receipts in 1964 averaged nearly 7 percent higher than in 1963.

Total expenditures per ranch averaged about 2 percent higher in 1964 than a year earlier, with small increases in feed and livestock expenditures and taxes. Expenditures for other major groups of items changed little if any from 1963 to 1964. The overall index of prices paid, including wages to hired labor, increased 3 points from a year earlier, but was 14 percent higher than in 1957-59.

These sheep operators depend largely on public domain or open range for grazing their sheep. In the early spring the sheep are grazed in the valleys and lands at lower elevations; in the summer they are mostly on National Forest lands at higher elevations; in the early fall they are back on the spring-fall ranges at lower elevations; and then for winter range they are grazed in the desert areas of east-central Nevada and west-central Utah. The latter are chiefly U.S. Bureau of Land Management lands. This type of operation requires considerable labor for herding, trailing, camp tending, and assisting with the shearing, lambing, and related jobs. It also requires transporting some sheep by truck or rail, since many of these grazing areas are widely scattered. Trucking and shipping have continued to increase as roads, trucks, and other technologies have improved. Also, as more land has been brought up, trespassing has become a problem in trailing sheep to the various ranges.

Although the 2-band operating unit has maintained about the same size of flock over the years, there has been an increase in total land operated. Ranchers have had to increase

their grazing lands and rely less on public domain and leased land, hired labor has remained about the same, but trucking and shipping have increased significantly. The total bill for shearing, trucking, machinery (purchases and operation), and labor averaged around \$14,200 per ranch in 1964. This was about 3.5 times the amount spent for these services and items in the early 1940's. Total investment per ranch has more than doubled since 1940 and currently runs around \$160,000, with about two-thirds of the investment in real estate.

Southwest

Lamb prices, at about \$17.50 per hundredweight in 1964, were the highest received by Southwestern sheep ranchers since 1958. Wool prices, at 51 cents, were the highest since 1954. Despite these favorable prices, net ranch income was about 45 percent below 1963 as these sheep ranchers were hit hard by the continuing 3-year drought. The drought was worse on sheep ranches than on cattle ranches because sheep ranches are concentrated in the eastern portion of the area, where the drought was most severe.

Sheep numbers per ranch were reduced in 1963 because of the drought, and they were further reduced during 1964. Cash receipts in 1964 were down about 8 percent from 1963 levels despite higher

lamb and wool prices. Lower production rates and reduced wool incentive payments were mainly responsible.

Cash expenditures in 1964 increased about 8 percent over the high level in 1963 (table 2). Feed costs again were a major part of cash expenditures, about 30 percent, and the highest since 1956. Sheep ranchers were less selective than Southwestern cattle ranchers in the kinds and amounts of cost reduction made in 1964. Although they bought fewer replacement animals, sheep ranchers increased expenditures for needed repairs and replacements of buildings and improvements, perhaps because they had delayed these expenditures for the last few years.

Net ranch incomes per sheep ranch were much less in 1964 than in 1963. Net income of about \$3,300 per ranch was substantially below the \$6,000 received in 1963 and the \$9,000 in the good production year of 1961. Consequently, net incomes were insufficient to cover a calculated capital charge and give a return to the operator and his family for their labor and management.

Index numbers as summary measures of price and production conditions in 1964 on Southwestern sheep ranches indicated unfavorable comparisons with 1963, with one exception. The only favorable change was prices received for products sold. An increase of 1 index point was insufficient to overcome the unfavorable changes in the production indexes.

Table 3.- Organization, production, income and

Item	Unit	1940	1941	1942
Land in ranch.....	Acre	9,660	9,660	9,670
Cropland harvested, pasture and farmstead..	do.	118	118	118
Grazing land.....	do.	9,542	9,542	9,552
Livestock on ranch, Jan. 1:				
All stock sheep.....	Number	2,286	2,268	2,250
Breeding ewes.....	do.	1,929	1,848	1,897
Lamb crop.....	Percent	80	86	80
Total cash receipts.....	Dollar	12,561	15,943	18,786
Sheep and lambs.....	do.	6,411	8,947	10,525
Wool.....	do.	5,747	6,551	7,635
Wool payments.....	do.	---	---	---
Other livestock and miscellaneous.....	do.	403	445	626
Total cash expenditures.....	do.	7,772	8,422	9,789
Feed and grazing fees.....	do.	2,228	2,213	2,346
Livestock expense.....	do.	550	639	826
Shearing.....	do.	413	453	529
Contract trucking.....	do.	253	297	339
Machinery purchased.....	do.	570	610	699
Machinery operating costs.....	do.	600	621	633
Ranch buildings and fences.....	do.	185	215	230
Labor hired.....	do.	2,117	2,475	3,311
Taxes.....	do.	458	481	448
Other.....	do.	398	418	428
Net cash ranch income.....	do.	4,789	7,521	8,997
Value of perquisites.....	do.	264	266	330
Change in inventory:				
Crops and livestock.....	do.	-337	56	-15
Machinery and buildings.....	do.	-42	-4	9
Net ranch income.....	do.	4,674	7,839	9,321

See footnote at end of table.

expenses, sheep ranches, Utah-Nevada, 1940-62 1/

1943	1944	1945	1946	1947	1948	1949	1950
9,680	9,700	9,740	9,780	9,820	9,860	9,900	9,930
119	120	121	122	123	124	125	125
9,561	9,580	9,619	9,658	9,697	9,736	9,775	9,805
2,241	2,243	2,239	2,147	2,149	2,299	2,317	2,146
1,930	1,972	1,995	1,909	1,872	1,979	1,937	1,800
78	78	77	83	84	85	78	84
19,064	19,367	21,424	24,169	26,304	34,808	29,948	35,766
10,643	10,562	12,757	15,054	17,056	23,598	20,604	23,066
7,600	7,951	7,714	8,028	8,199	9,952	8,329	11,345
---	---	---	---	---	---	---	---
821	854	953	1,087	1,049	1,258	1,015	1,355
11,344	12,810	13,255	13,660	15,846	17,194	17,506	17,185
2,789	3,112	3,142	3,172	3,772	4,022	4,972	3,968
779	915	916	958	1,227	1,527	1,184	1,913
598	661	687	686	747	855	834	798
386	417	475	469	528	645	644	629
756	818	849	892	1,035	1,159	1,237	1,192
632	623	626	642	721	832	951	893
245	285	295	390	460	530	515	280
4,019	4,813	5,040	5,208	5,860	6,052	5,435	5,752
688	670	744	731	921	999	1,097	1,101
452	496	481	512	575	573	637	659
7,720	6,557	8,169	10,509	10,458	17,614	12,442	18,581
361	353	386	417	505	597	602	624
137	136	-1,199	-316	3,242	107	-3,737	3,108
25	75	84	145	181	212	174	-138
8,243	7,121	7,440	10,755	14,386	18,530	9,481	22,175

Table 3.- Organization, production, income and

Item	Unit	1951	1952	1953
Land in ranch.....	Acre	9,970	10,000	10,040
Cropland harvested, pasture and farmstead..	do.	126	126	127
Grazing land.....	do.	9,844	9,874	9,913
Livestock on ranch, Jan. 1:				
All stock sheep.....	Number	2,243	2,299	2,329
Breeding ewes.....	do.	1,837	1,890	1,940
Lamb crop.....	Percent	85	86	83
Total cash receipts.....	Dollar	51,413	38,245	29,800
Sheep and lambs.....	do.	29,802	25,252	17,848
Wool.....	do.	19,758	11,614	11,038
Wool payments.....	do.	---	---	---
Other livestock and miscellaneous.....	do.	1,853	1,379	914
Total cash expenditures.....	do.	19,564	21,540	20,134
Feed and grazing fees.....	do.	4,559	5,715	4,441
Livestock expense.....	do.	2,482	2,503	1,952
Shearing.....	do.	949	983	1,018
Contract trucking.....	do.	719	773	828
Machinery purchased.....	do.	1,306	1,370	1,378
Machinery operating costs.....	do.	920	965	989
Ranch buildings and fences.....	do.	450	545	585
Labor hired.....	do.	6,435	6,788	7,134
Taxes.....	do.	1,105	1,232	1,184
Other.....	do.	639	666	625
Net cash ranch income.....	do.	31,849	16,705	9,666
Value of perquisites.....	do.	771	806	649
Change in inventory:				
Crops and livestock.....	do.	1,963	894	-1,508
Machinery and buildings.....	do.	38	129	185
Net ranch income.....	do.	34,621	18,534	8,992

1/ Two-band, desert-operated series.

expenses, sheep ranches, Utah-Nevada, 1940-62 1/ - Continued

1954	1955	1956	1957	1958	1959	1960	1961	1962
10,080	10,110	10,140	10,150	10,160	10,170	10,180	10,190	10,200
127	128	128	129	129	130	131	131	131
9,953	9,982	10,012	10,021	10,031	10,040	10,049	10,059	10,069
2,229	2,196	2,258	2,235	2,293	2,300	2,348	2,247	2,141
1,935	1,919	1,928	1,985	1,940	1,937	1,991	1,932	1,833
87	86	88	86	90	88	88	88	90
32,524	34,526	36,685	37,370	40,915	36,188	35,990	33,785	36,540
20,484	20,195	21,927	22,752	24,760	20,661	20,643	18,398	21,573
11,104	8,875	9,541	11,572	8,133	9,583	9,054	9,385	10,259
---	4,542	4,343	1,891	6,555	4,677	4,972	4,726	3,428
936	914	874	1,155	1,467	1,267	1,321	1,276	1,280
19,295	20,289	20,136	21,102	20,965	22,027	22,844	23,218	23,617
4,246	4,519	4,057	3,888	3,844	4,298	4,681	4,755	4,381
1,520	1,624	1,611	1,990	1,652	1,592	1,136	1,230	1,679
964	970	1,019	1,072	1,099	1,136	1,217	1,199	1,151
813	853	890	965	994	1,047	1,115	1,079	1,087
1,374	1,454	1,443	1,580	1,652	1,685	1,631	1,656	1,690
1,036	1,069	1,049	1,108	1,079	1,135	1,186	1,203	1,185
615	595	615	620	685	640	705	730	745
7,076	7,397	7,474	7,681	7,672	7,939	8,415	8,428	8,673
1,066	1,179	1,367	1,507	1,657	1,862	2,018	2,240	2,269
585	629	611	691	631	693	740	698	757
13,229	14,237	16,549	16,268	19,950	14,161	13,146	10,567	12,923
608	616	619	687	721	703	658	630	617
-676	1,070	277	955	-27	1,128	-2,040	-1,763	1,265
189	208	214	221	282	194	196	224	232
13,350	16,131	17,659	18,131	20,926	16,186	11,960	9,658	15,037

Table 4.- Labor, capital, costs and returns,

Item	Unit	1940	1941	1942
Total labor used.....	Hour	7,840	7,850	7,850
Total ranch capital, Jan. 1.....	Dollar	72,580	73,850	82,100
Land and buildings.....	do.	52,050	52,690	55,030
Machinery and equipment.....	do.	2,310	2,370	2,600
Livestock.....	do.	17,740	18,410	23,900
Crops.....	do.	480	380	570
Gross ranch income.....	do.	12,488	16,265	19,101
Operating expenses.....	do.	7,814	8,426	9,780
Net ranch income.....	do.	4,674	7,839	9,321
Purchasing power in 1947-49 dollars.....	do.	9,539	14,517	15,280
Charge for capital at current interest rates..	do.	2,903	2,954	3,284
Return per hour, operator and family labor....	do.	.48	1.32	1.63
Charge for capital at 4.1 percent interest....	do.	2,976	3,028	3,366
Return per hour, operator and family labor....	do.	.46	1.30	1.61
INDEX NUMBERS (1957-59=100):				
Gross ranch income.....	---	32	41	48
Net ranch income.....	---	25	43	51
Net ranch production.....	---	74	80	79
Range conditions.....	---	117	122	129
Production per hour of man labor.....	---	74	80	79
Production per unit of input.....	---	79	84	83
Operating expense per unit of production....	---	48	49	57
Total cost per unit of production.....	---	49	50	58
Power and machinery (quantity).....	---	91	90	93
Prices received for products sold <u>2</u> /.....	---	46	57	68
Prices paid, including wages to hired labor..	---	38	41	48

See footnote at end of table.

sheep ranches, Utah-Nevada, 1940-62 1/

1943	1944	1945	1946	1947	1948	1949	1950
7,860	7,880	7,880	7,840	7,880	7,880	7,830	7,850
90,560	96,020	102,720	107,910	117,690	136,940	141,900	138,700
60,430	66,230	72,760	76,700	80,380	84,240	85,150	85,460
2,760	2,920	3,030	3,220	3,710	4,180	4,500	4,640
26,550	25,670	25,680	26,800	32,330	46,910	50,590	47,450
820	1,200	1,250	1,190	1,270	1,610	1,660	1,150
19,562	19,856	20,611	24,270	30,051	35,512	26,813	39,498
11,319	12,735	13,171	13,515	15,665	16,982	17,332	17,323
8,243	7,121	7,440	10,755	14,386	18,530	9,481	22,175
12,122	9,890	9,920	12,958	14,831	17,990	9,481	21,955
3,622	3,841	4,109	4,316	4,708	5,478	5,676	5,548
1.25	.89	.90	1.74	2.62	3.53	1.03	4.49
3,713	3,937	4,212	4,424	4,825	5,615	5,818	5,687
1.22	.86	.87	1.71	2.58	3.49	.99	4.46
49	50	52	61	76	90	68	100
45	39	40	58	78	101	51	120
78	77	78	82	87	88	65	86
114	117	110	118	112	106	75	106
78	76	77	82	86	87	65	85
82	81	82	87	91	90	69	89
67	76	78	76	84	90	118	94
68	76	79	78	84	91	119	94
95	95	96	98	98	98	95	96
70	72	72	83	99	114	108	129
55	61	64	66	76	81	81	84

Table 4.- Labor, capital, costs and returns,

Item	Unit	1951	1952	1953
Total labor used.....	Hour	7,800	7,830	7,840
Total ranch capital, Jan. 1.....	Dollar	175,610	196,330	150,190
Land and buildings.....	do.	93,130	97,070	93,990
Machinery and equipment.....	do.	4,930	5,090	5,080
Livestock.....	do.	76,100	92,410	49,510
Crops.....	do.	1,450	1,760	1,610
Gross ranch income.....	do.	54,147	39,945	28,941
Operating expenses.....	do.	19,526	21,411	19,949
Net ranch income.....	do.	34,621	18,534	8,992
Purchasing power in 1947-49 dollars.....	do.	31,474	16,697	8,175
Charge for capital at current interest rates...	do.	7,024	7,853	6,008
Return per hour, operator and family labor....	do.	7.46	2.89	.81
Charge for capital at 4.1 percent interest....	do.	7,200	8,050	6,158
Return per hour, operator and family labor....	do.	7.41	2.83	.77
INDEX NUMBERS (1957-59=100):				
Gross ranch income.....	---	137	101	73
Net ranch income.....	---	188	101	49
Net ranch production.....	---	90	91	86
Range conditions.....	---	103	96	101
Production per hour of man labor.....	---	90	91	86
Production per unit of input.....	---	92	93	87
Operating expense per unit of production....	---	102	109	108
Total cost per unit of production.....	---	105	112	108
Power and machinery (quantity).....	---	96	96	96
Prices received for products sold <u>2</u> /.....	---	171	124	93
Prices paid, including wages to hired labor..	---	94	101	95

1/ Two-band, desert-operated series.2/ Including wool incentive payment.

sheep ranches, Utah-Nevada, 1940-62 1/ - Continued

1954	1955	1956	1957	1958	1959	1960	1961	1962
7,840	7,840	7,870	7,840	7,830	7,800	7,800	7,780	7,810
143,120	144,470	141,590	145,300	158,750	168,850	159,220	149,740	146,710
92,970	91,910	89,980	91,190	91,670	95,500	96,290	97,800	100,430
5,130	5,310	5,360	5,800	6,080	6,370	6,460	6,490	6,600
43,580	45,740	44,780	46,330	59,410	65,560	54,700	43,920	38,140
1,440	1,510	1,470	1,980	1,590	1,420	1,770	1,530	1,540
32,456	36,212	37,581	39,012	41,609	38,019	34,608	32,652	38,422
19,106	20,081	19,922	20,881	20,683	21,833	22,648	22,994	23,385
13,350	16,131	17,659	18,131	20,926	16,186	11,960	9,658	15,037
12,027	14,532	15,767	15,630	17,734	13,717	10,050	8,116	12,427
5,725	5,779	5,664	6,538	8,731	8,442	9,553	8,984	8,069
2.06	2.80	3.24	3.13	3.30	2.09	.65	.18	1.88
5,868	5,923	5,805	5,957	6,509	6,923	6,528	6,139	6,015
2.02	2.76	3.20	3.29	3.90	2.50	1.47	.95	2.44
82	92	95	99	105	96	88	83	97
72	88	96	98	114	88	65	52	82
95	96	100	100	99	101	99	95	100
86	82	103	96	106	98	87	84	95
95	96	100	100	99	101	100	95	100
96	97	101	100	100	100	98	94	100
94	98	94	99	99	102	107	113	110
94	96	93	98	99	103	105	110	107
97	100	98	100	100	100	101	101	101
96	95	94	99	106	95	86	84	98
90	94	94	99	99	102	104	106	110

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